POPULATION HEALTH FACILITY UWAC - ULAC

PROJECT GOALS

Foster collaboration and connectivity amongst those

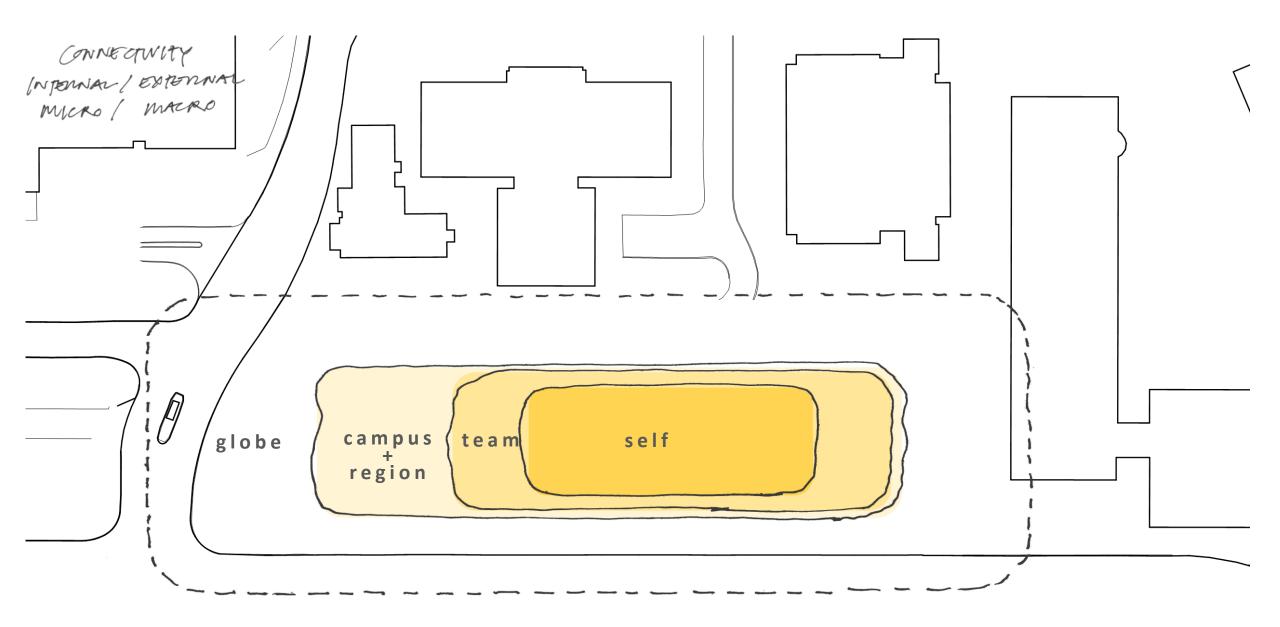
working within the facility, with other programs and with researchers at UW, local and global partners, and students

Promote healthy living within and around the new facility

Design space that is flexible and adaptable to meet the evolving needs of IHME, DGH and SPH

Employ best practices in sustainable building to reduce energy and water use, lower life cycle costs, and improve occupant satisfaction and health

Support and further the institution-wide population health vision.



CONNECTION TO THE PLANET



communications

reduced water use

reduced carbon emissions

responsible materials

CONNECTION TO THE CAMPUS + REGION



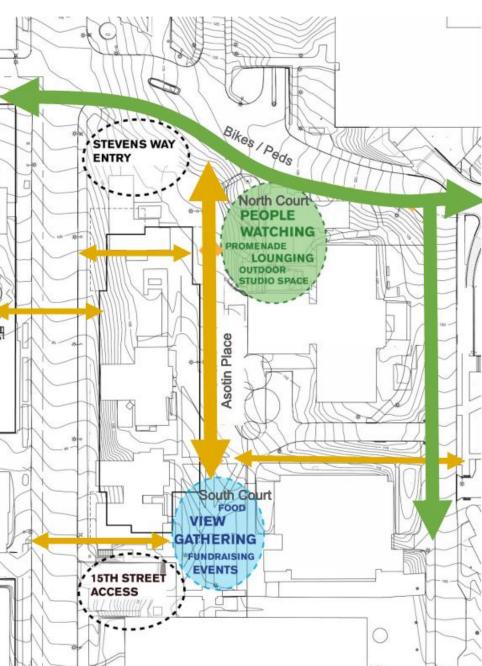
energy

iconic views

accessibility

stormwater





Site Program









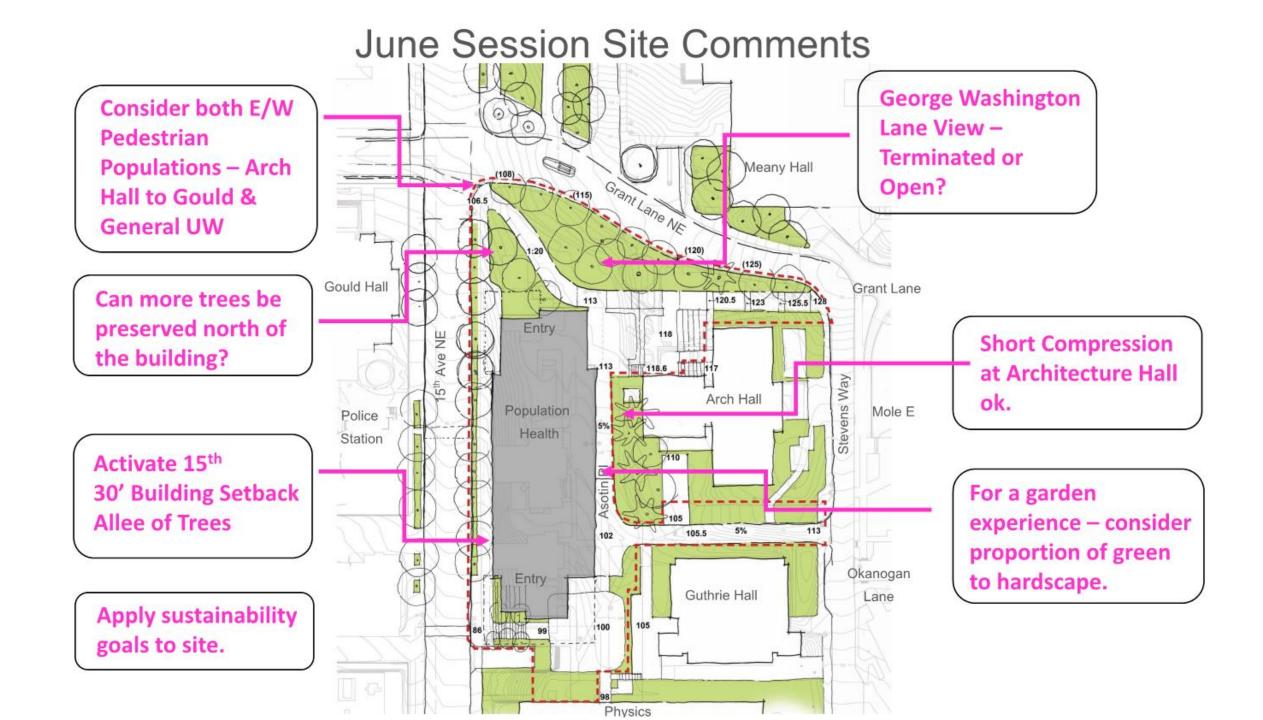












POPULATION HEALTH FACILITY Iandscape design progress

SITE CONNECTIVITY

CAMPUS CONNECTIVITY

ENVIRONMENTAL CONNECTIVITY HUMAN CONNECTIVITY

PEDESTRIANS & ADA CIRCULATION TREE PRESERVATION BICYCLE PARKING & CIRCULATION SUSTAINABLE STORMWATER SOCIAL INTERACTION & EVENTS ADA PARKING & TRANSIT HORTICULTURE

HFALTH & WFLLNESS



LANDSCAPE MOSAIC : EXISTING



UW'S CAMPUS LANDSCAPE FRAMEWORK: LANDSCAPE MOSAIC, 2015

LANDSCAPE MOSAIC : EXISTING CHARACTER

PASSAGE



COURTYARD/TERRACES



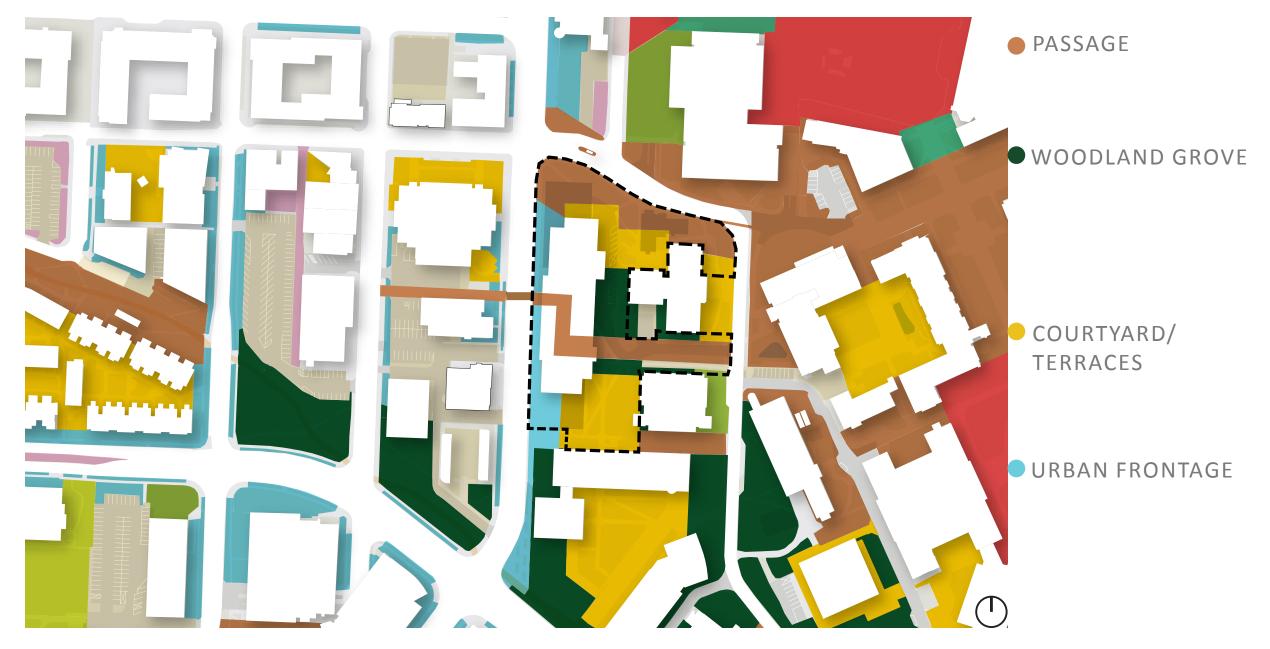
• WOODLAND GROVE



URBAN FRONTAGE



LANDSCAPE MOSAIC : PROPOSED



LANDSCAPE MOSAIC : PROPOSED

PASSAGE

CAMPUS CONNECTOR - GRANT LANE





URBAN FRONTAGE - 15TH STREET



TERRACES



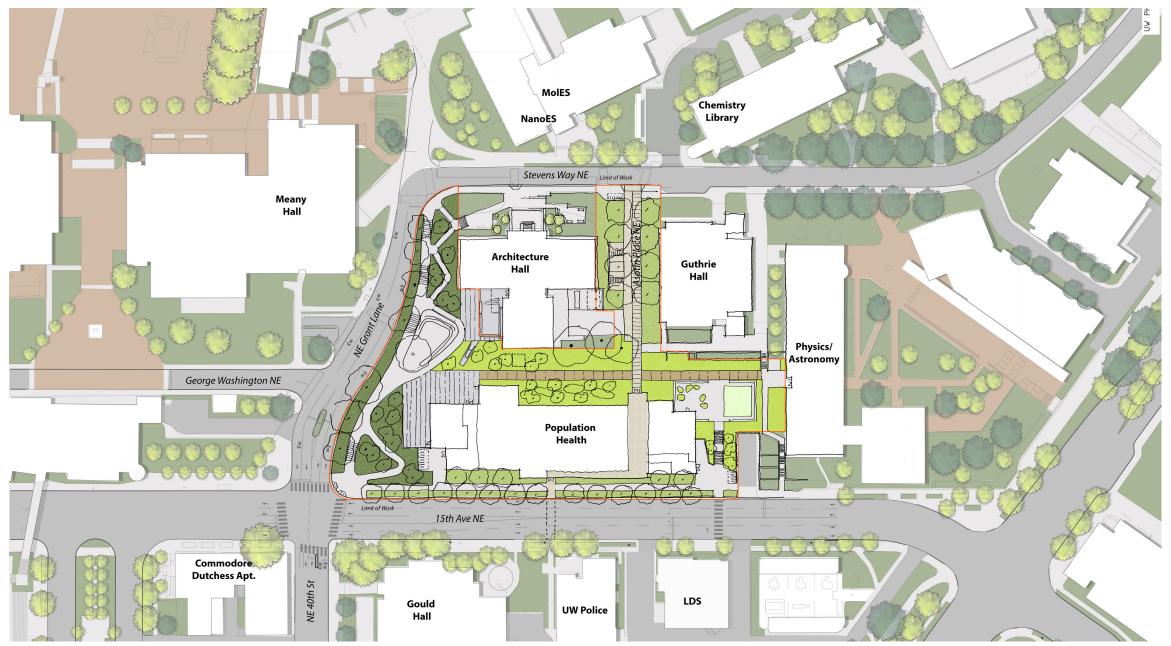
WOODLAND GROVE - GARDEN WALK





URBAN PASSAGE - ASOTIN LANE

LANDSCAPE SCHEMATIC DESIGN - OPTION 01



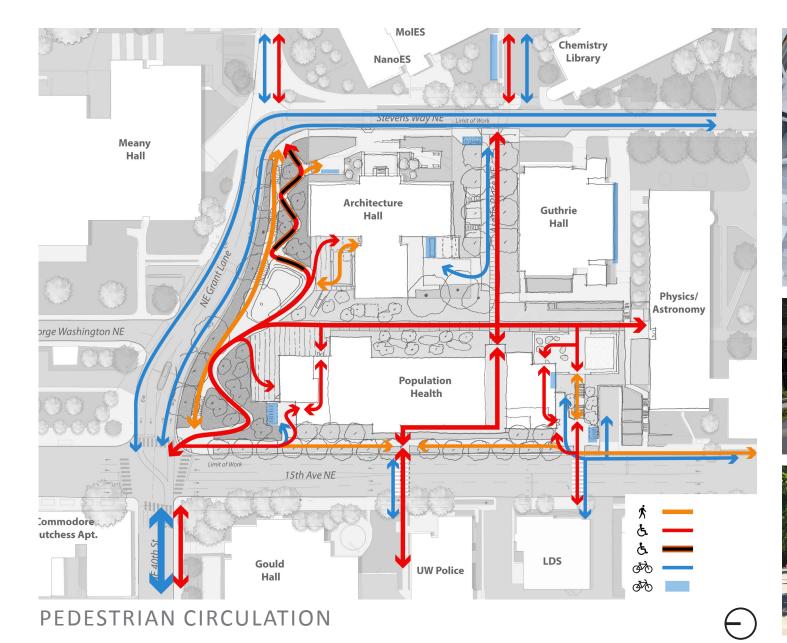
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LANDSCAPE SCHEMATIC DESIGN - OPTION 02



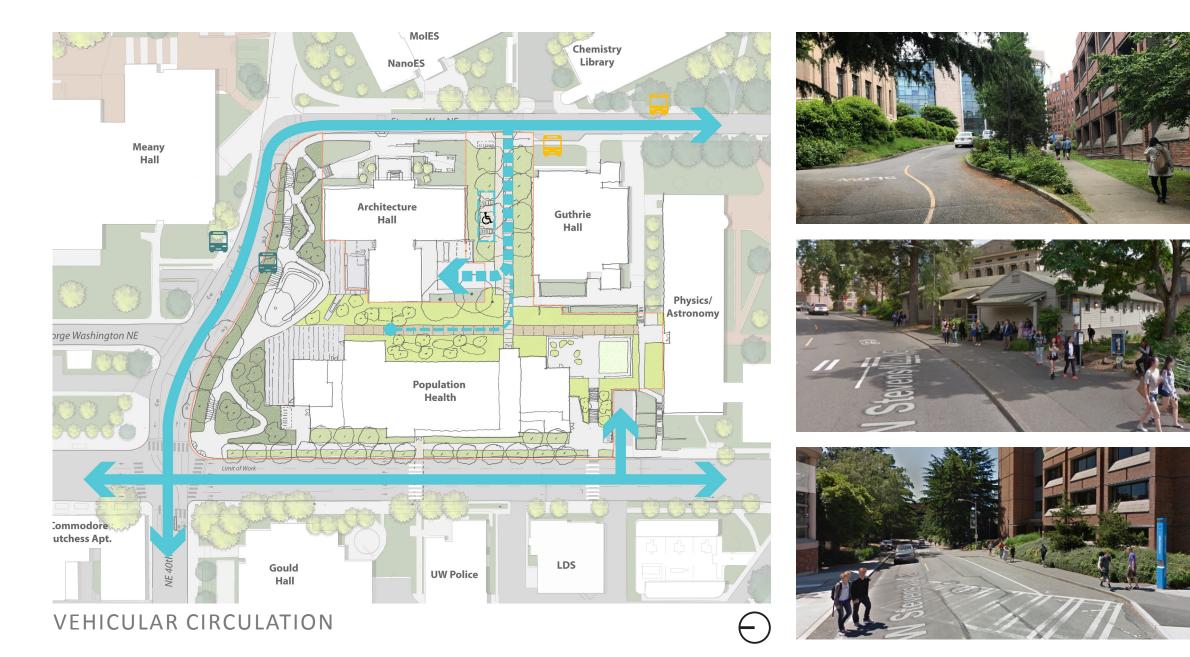
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CAMPUS CONNECTIVITY

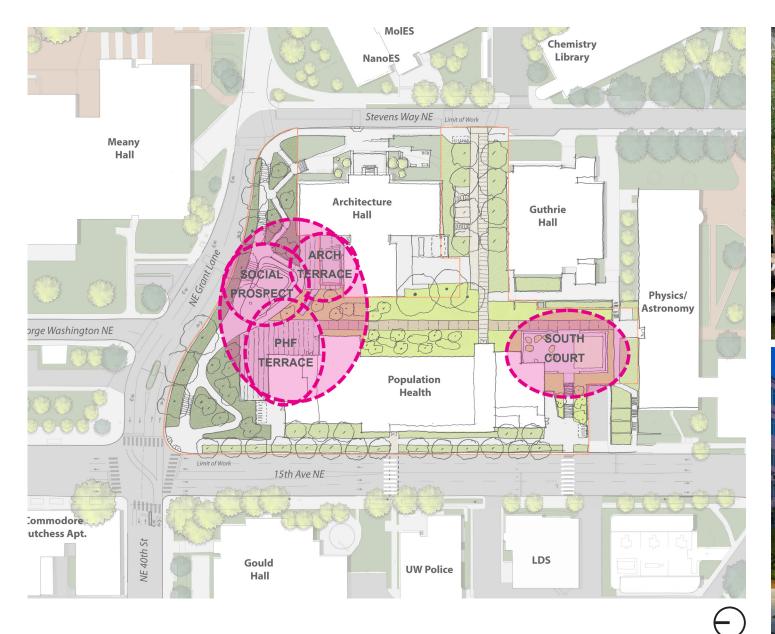




CAMPUS CONNECTIVITY

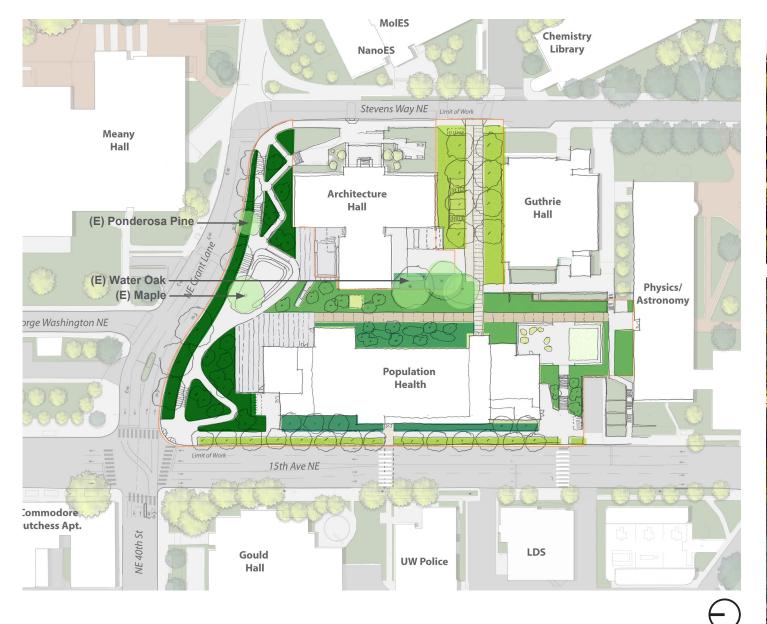


SOCIAL CONNECTIVITY



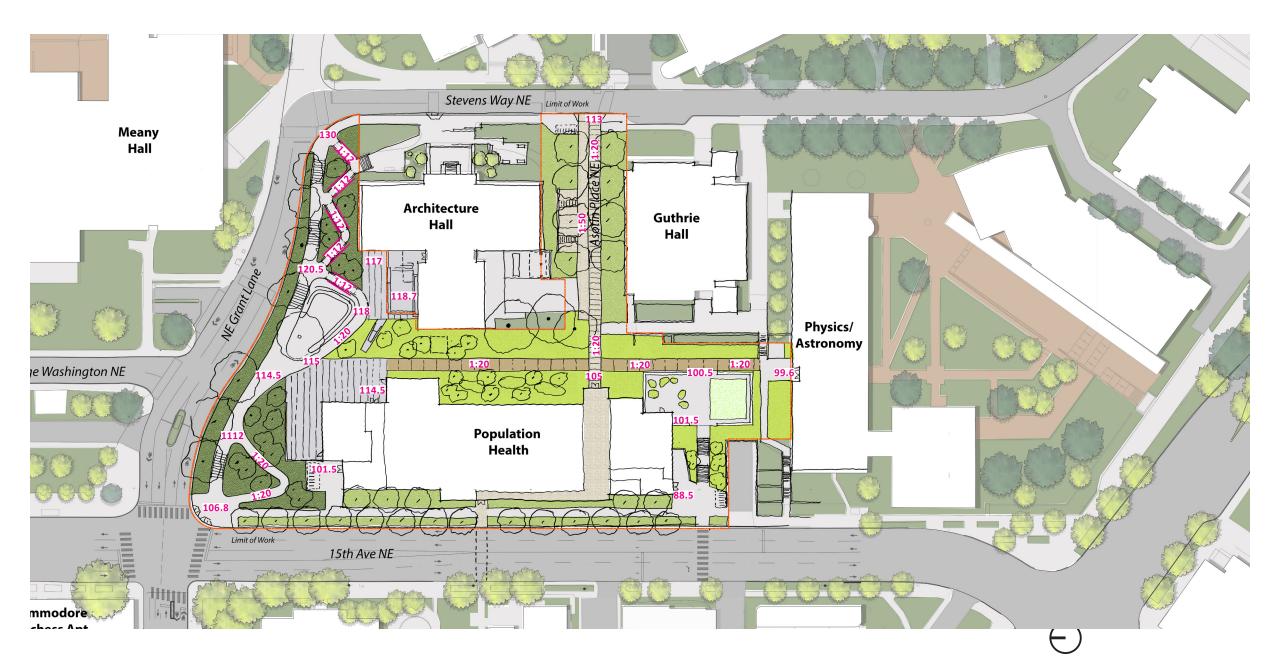


ENVIRONMENTAL CONNECTIVITY

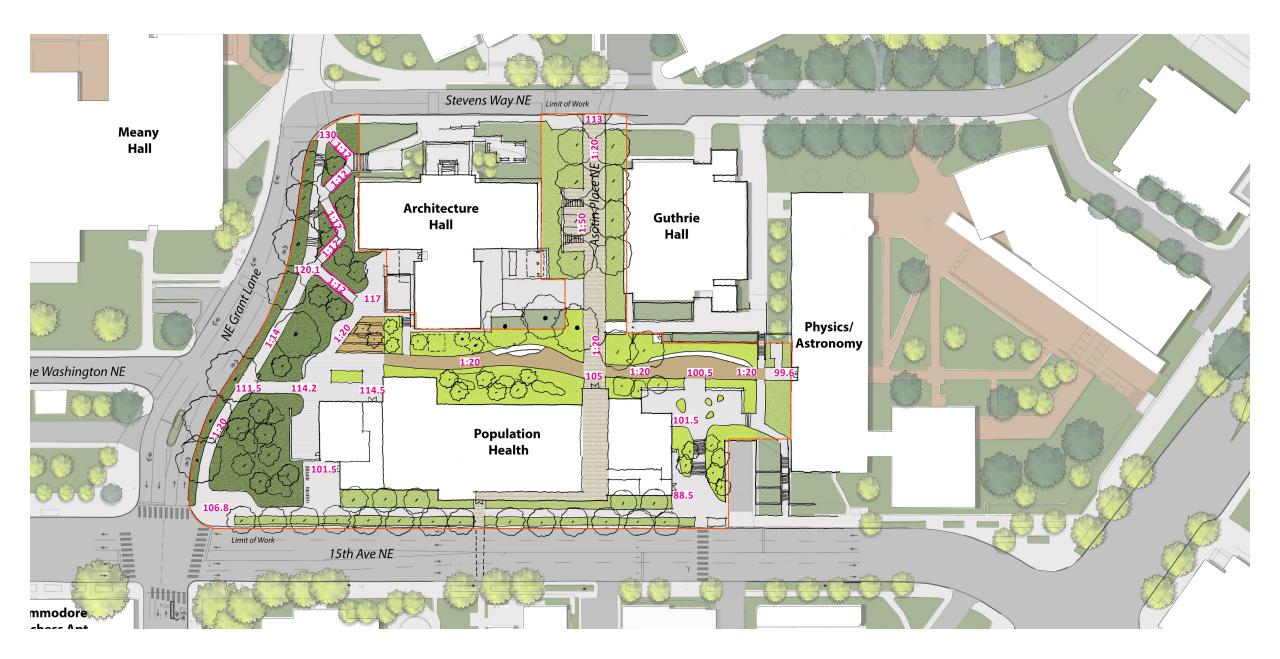


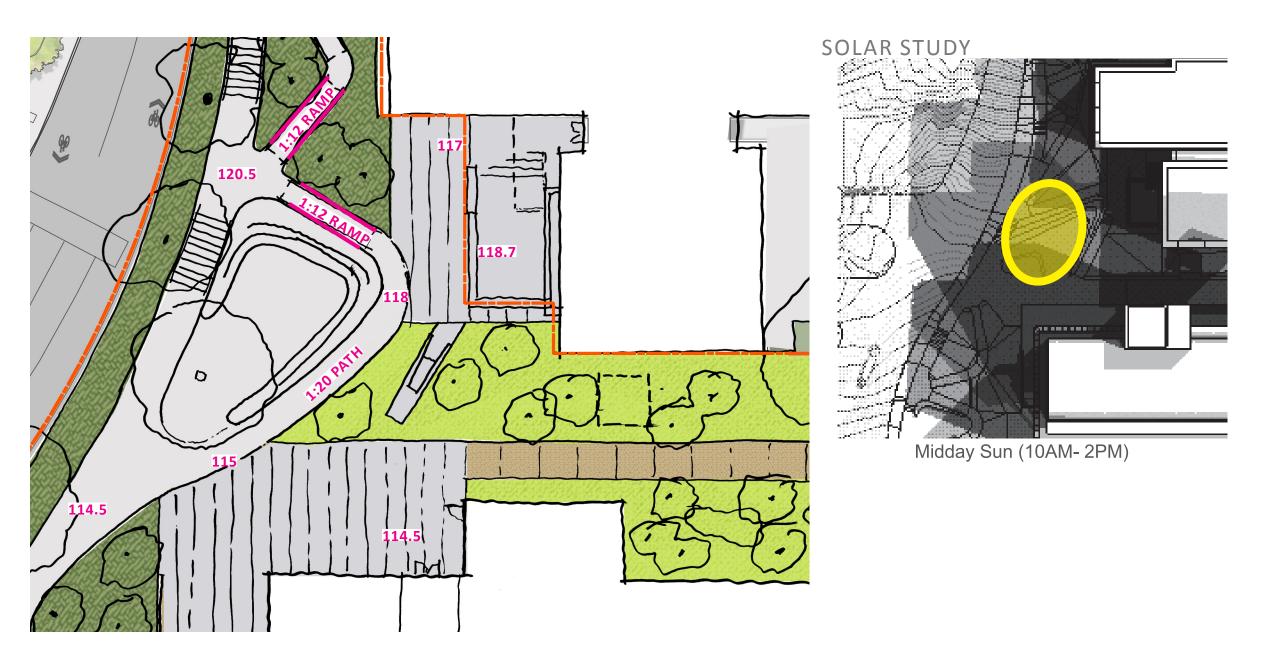


LANDSCAPE SCHEMATIC DESIGN - OPTION 01

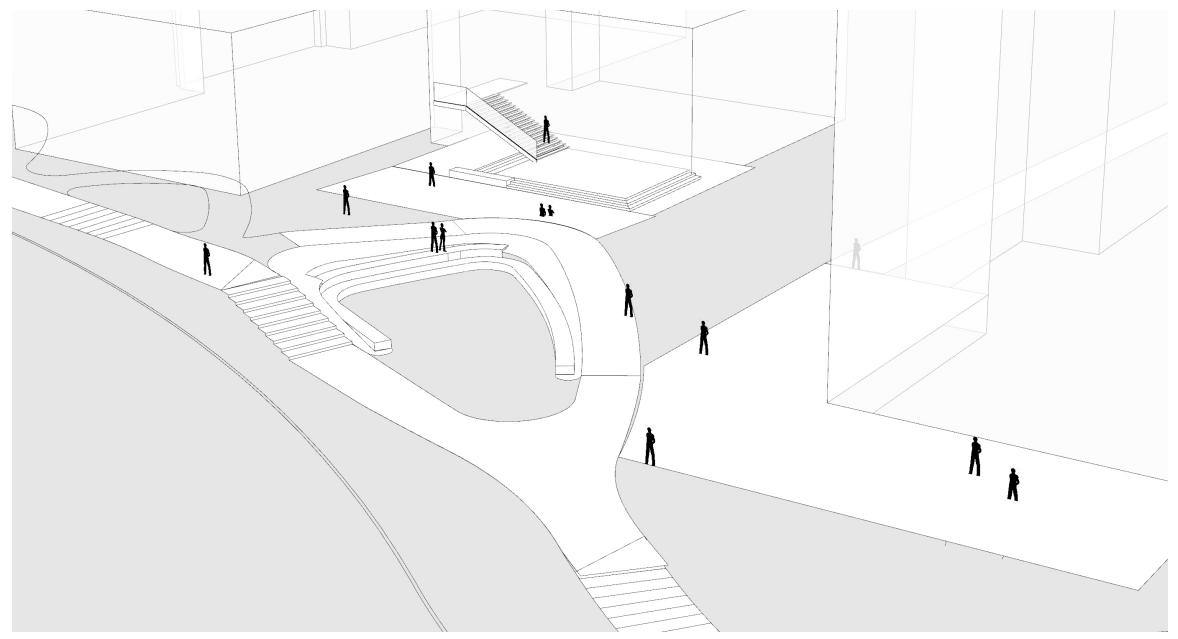


LANDSCAPE SCHEMATIC DESIGN - OPTION 02





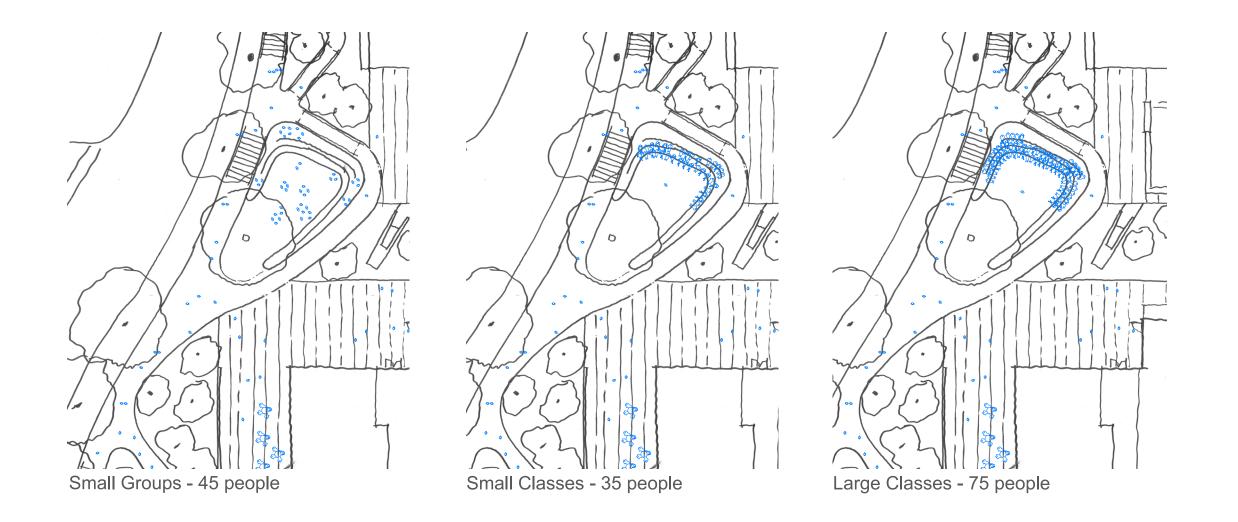
SOCIAL PROSPECT- OPTION 1 - Curved Amphitheater



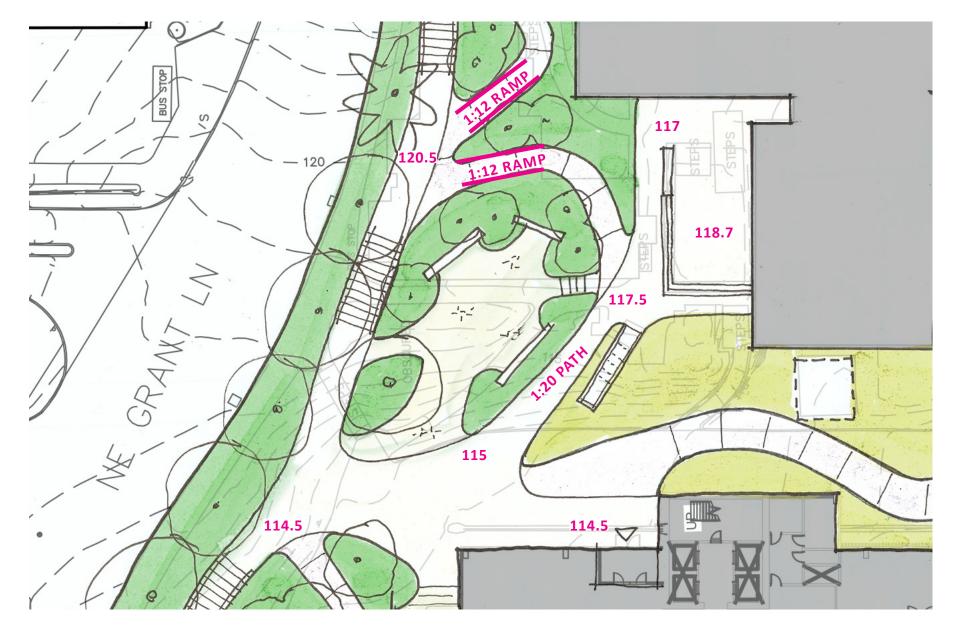
SOCIAL PROSPECT- OPTION 1 - Curved Amphitheater



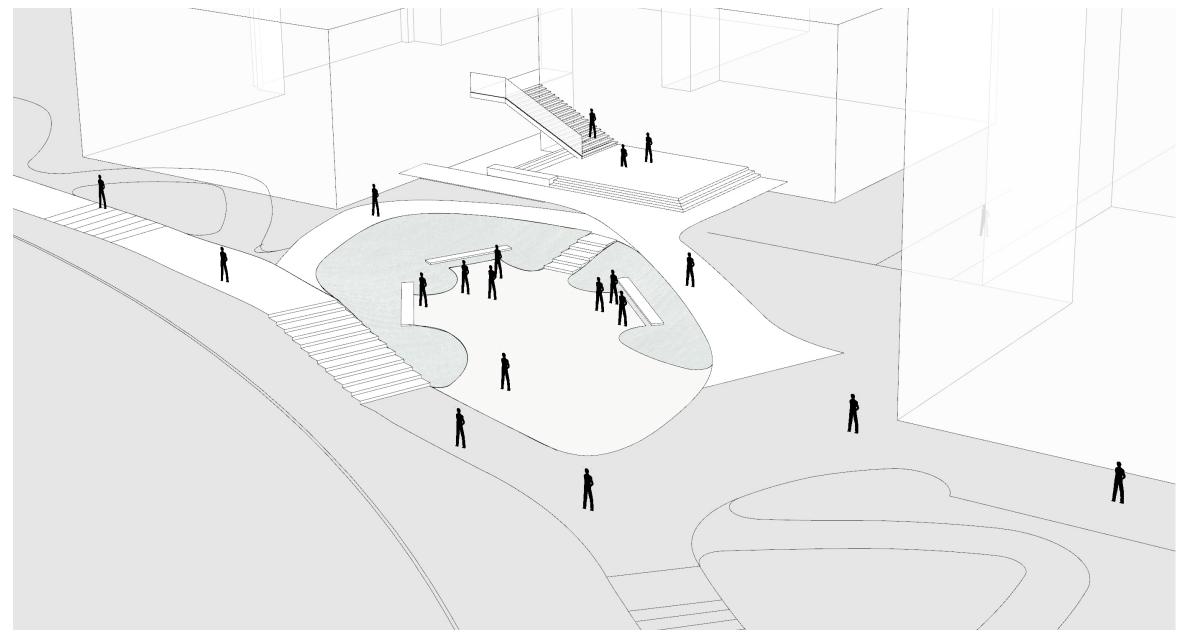




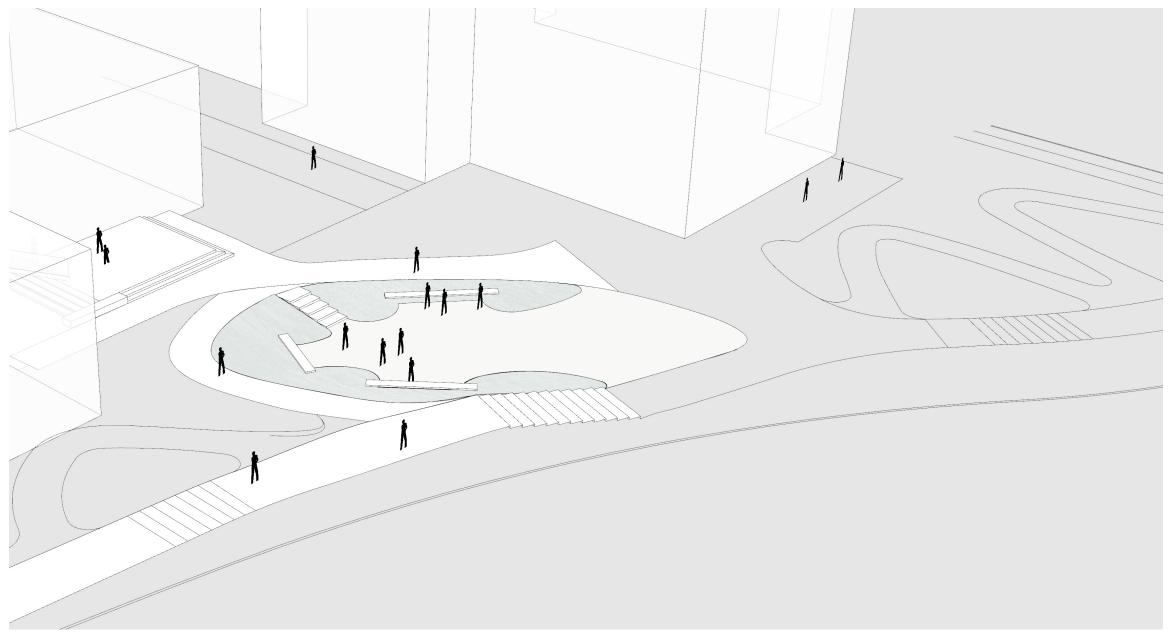
SOCIAL PROSPECT - OPTION 2- Garden Room

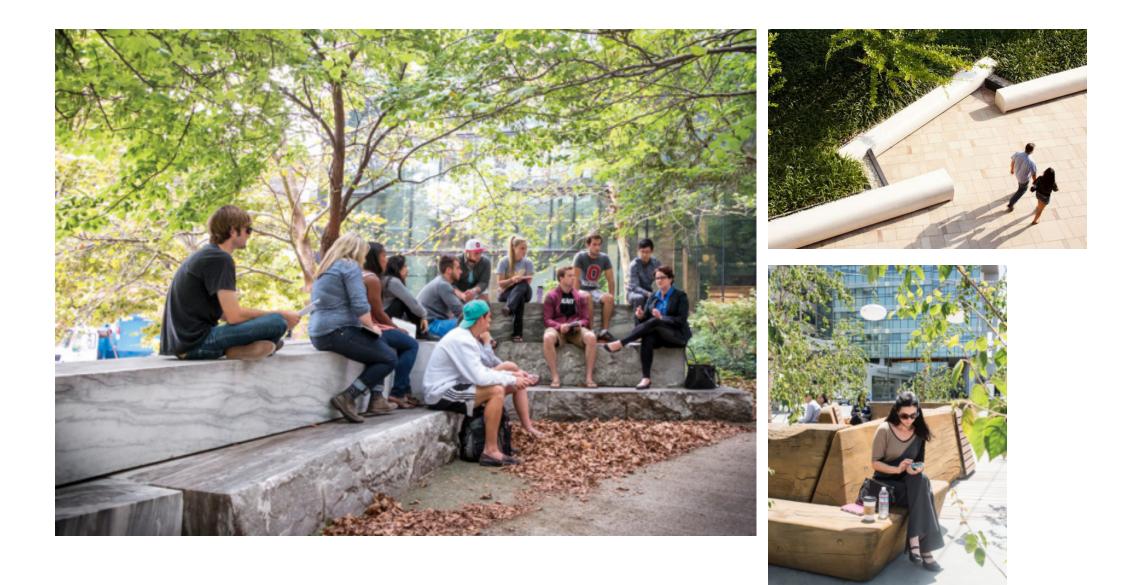


SOCIAL PROSPECT - OPTION 2- Garden Room

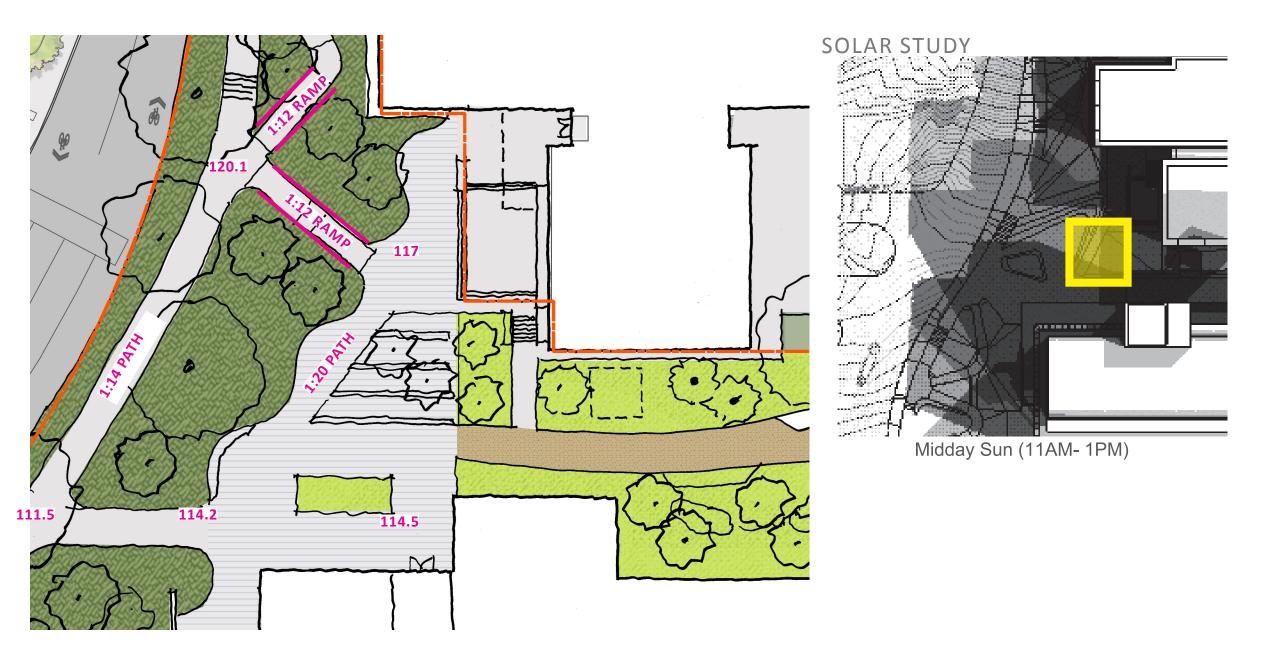


SOCIAL PROSPECT - OPTION 2- Garden Room

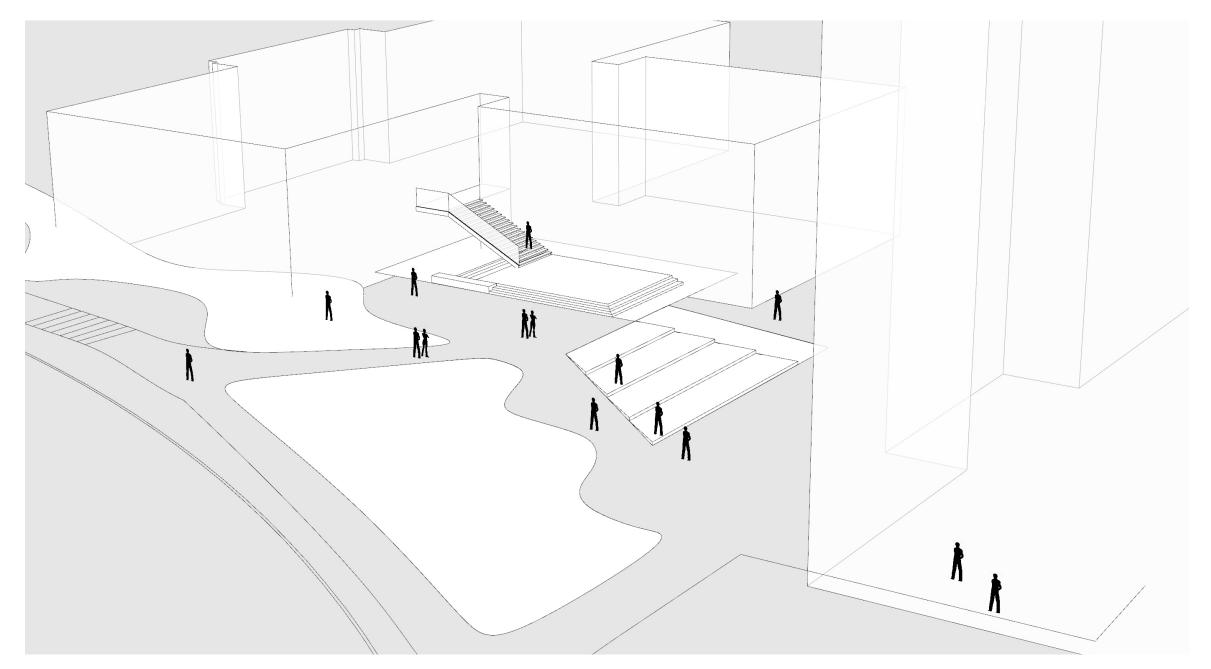




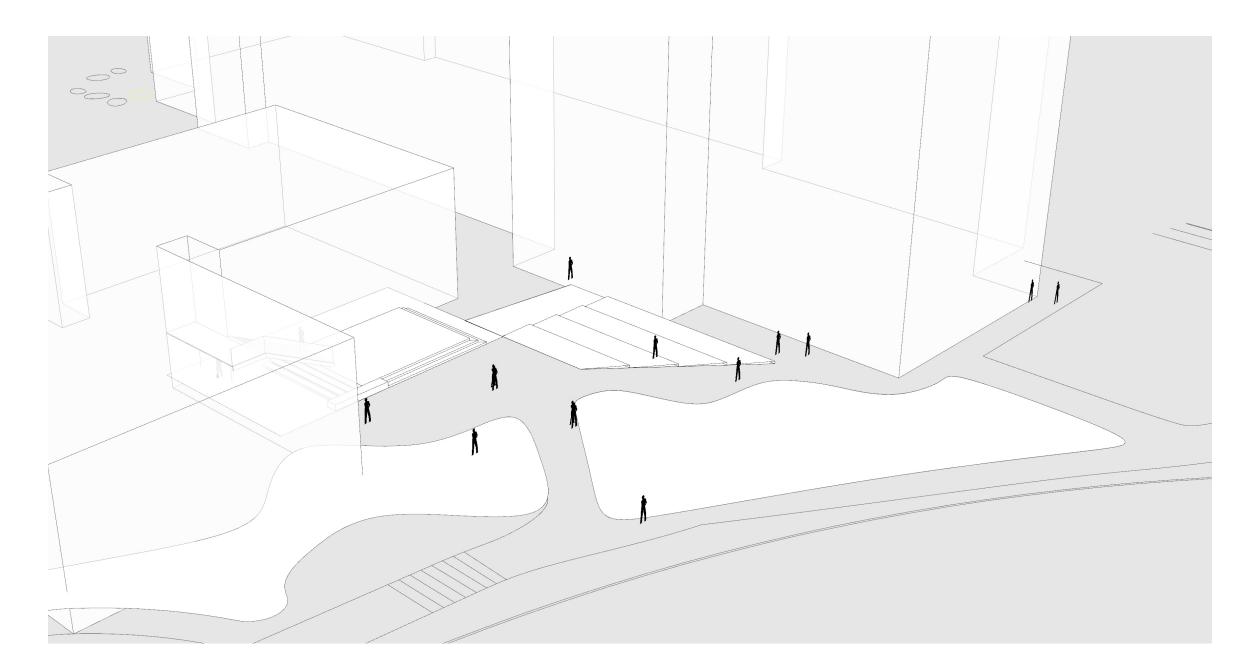
SOCIAL PROSPECT - OPTION 3 - Orthogonal Amphitheater



SOCIAL PROSPECT - OPTION 2 - Orthogonal Amphitheater

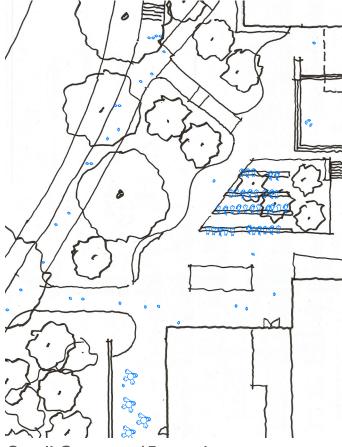


SOCIAL PROSPECT - OPTION 2 - Orthogonal Amphitheater

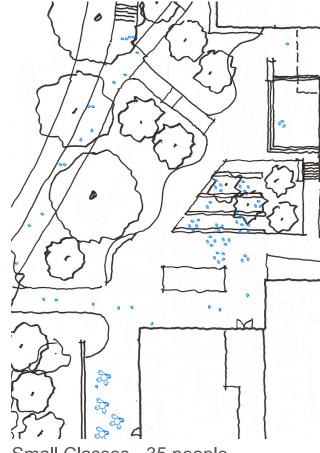


SOCIAL PROSPECT - OPTION 3 - Orthogonal Amphitheater

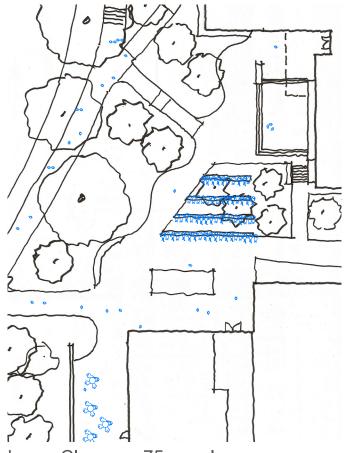




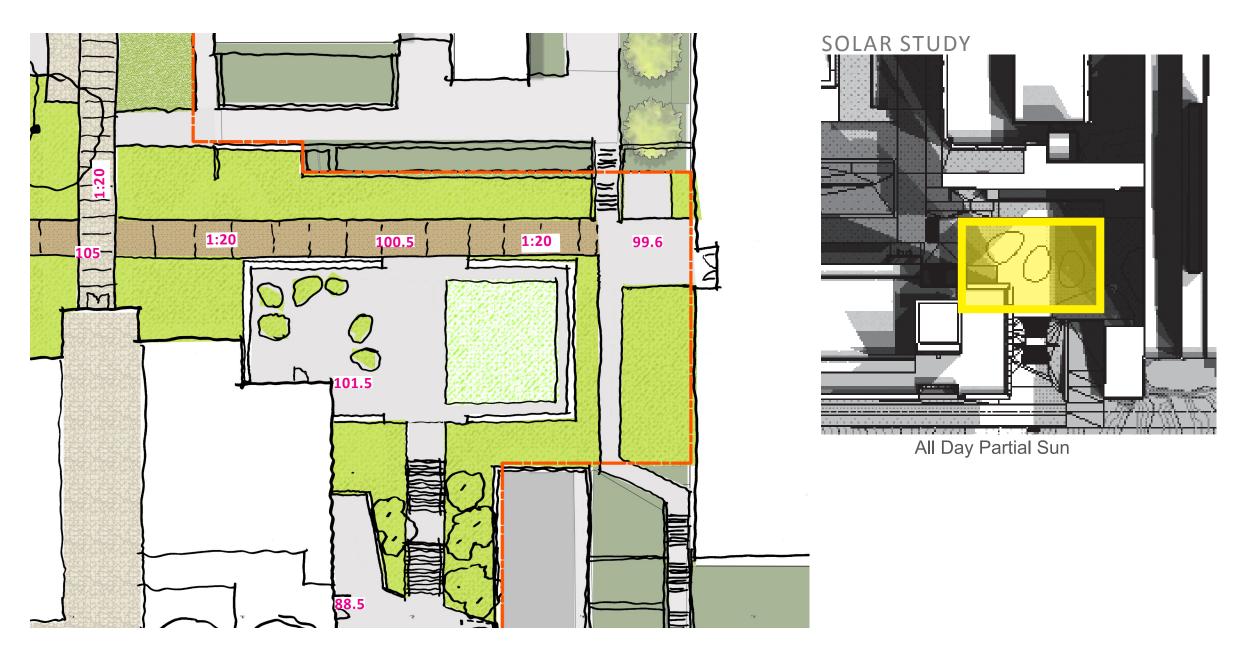
Small Groups - 45 people



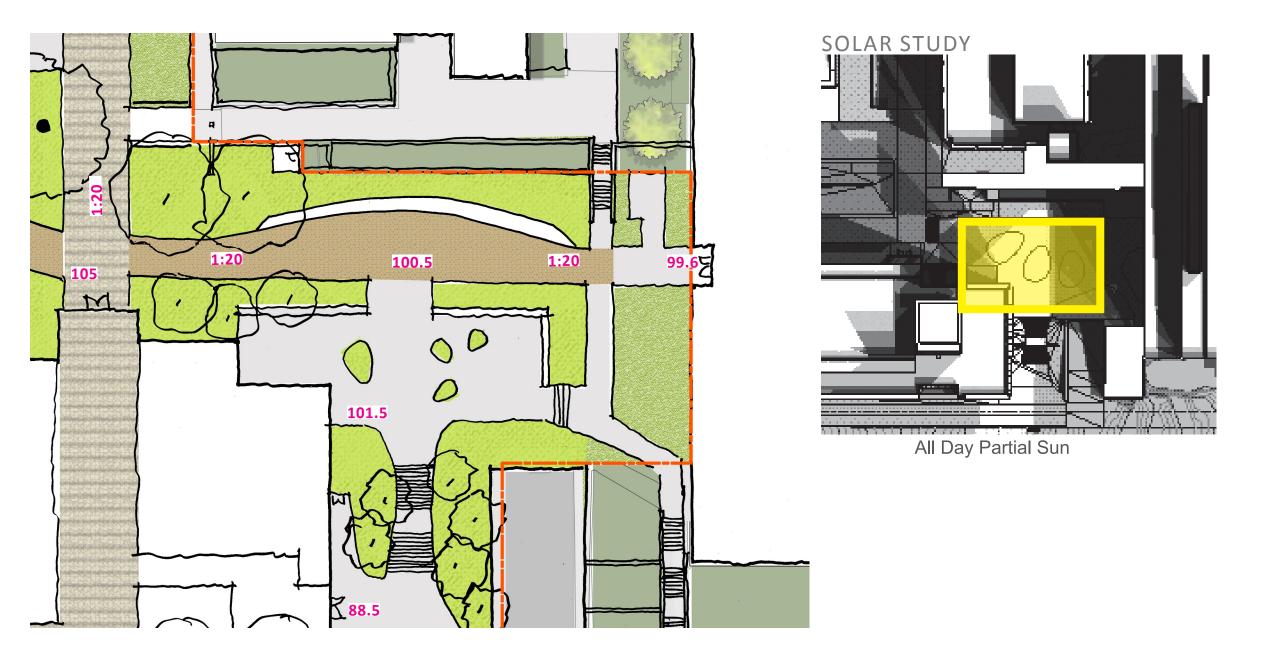




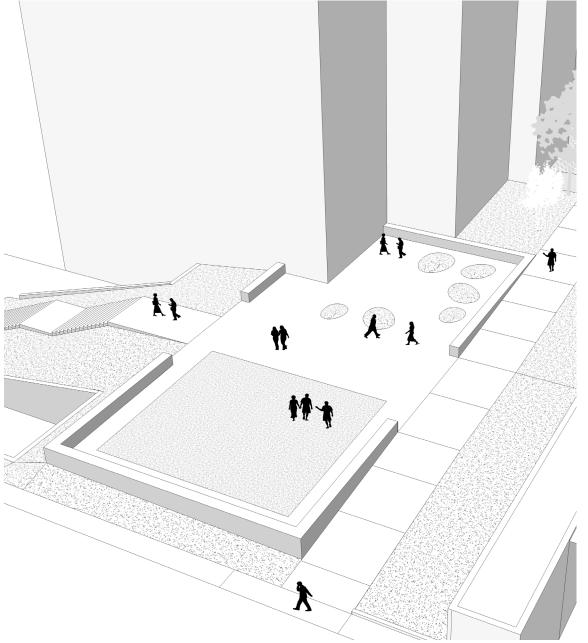
Large Classes - 75 people

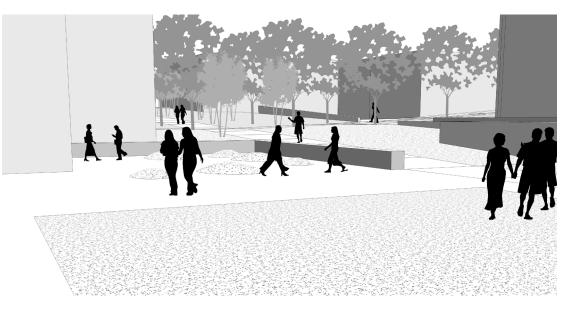


SOUTH COURT - OPTION 2



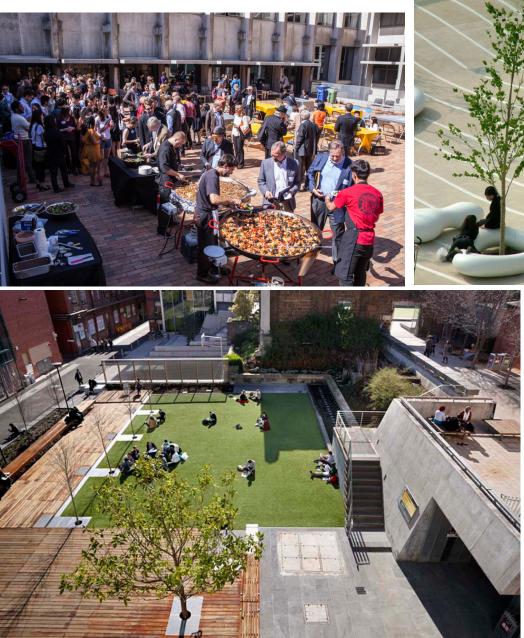
SOUTH COURT



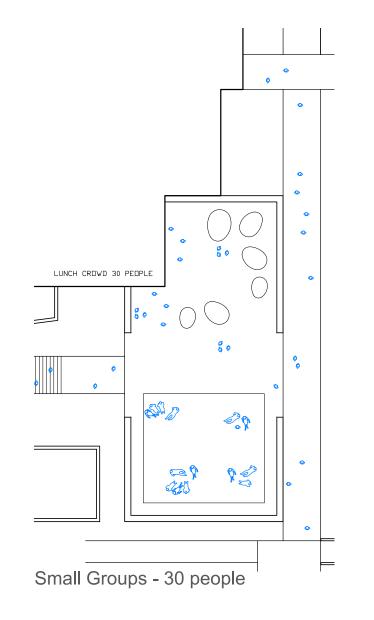


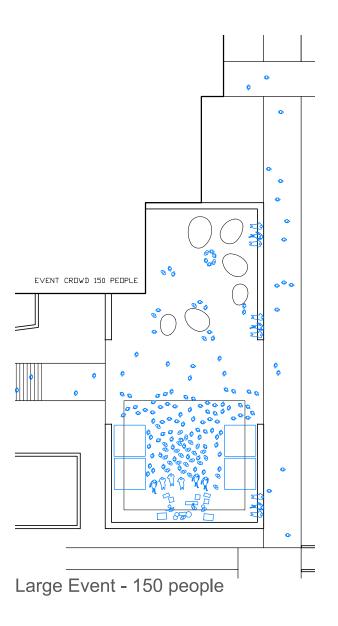
SOUTH COURT



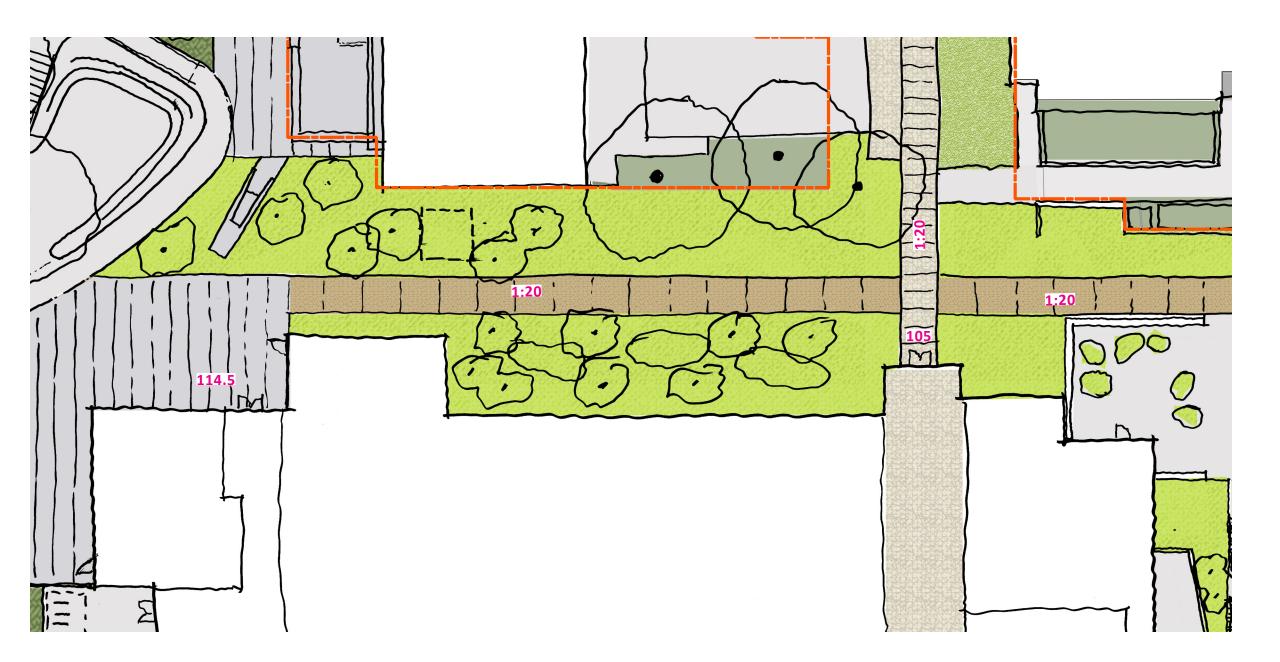


SOUTH COURT EVENTS





GARDEN WALK - OPTION 1 - Straight Path



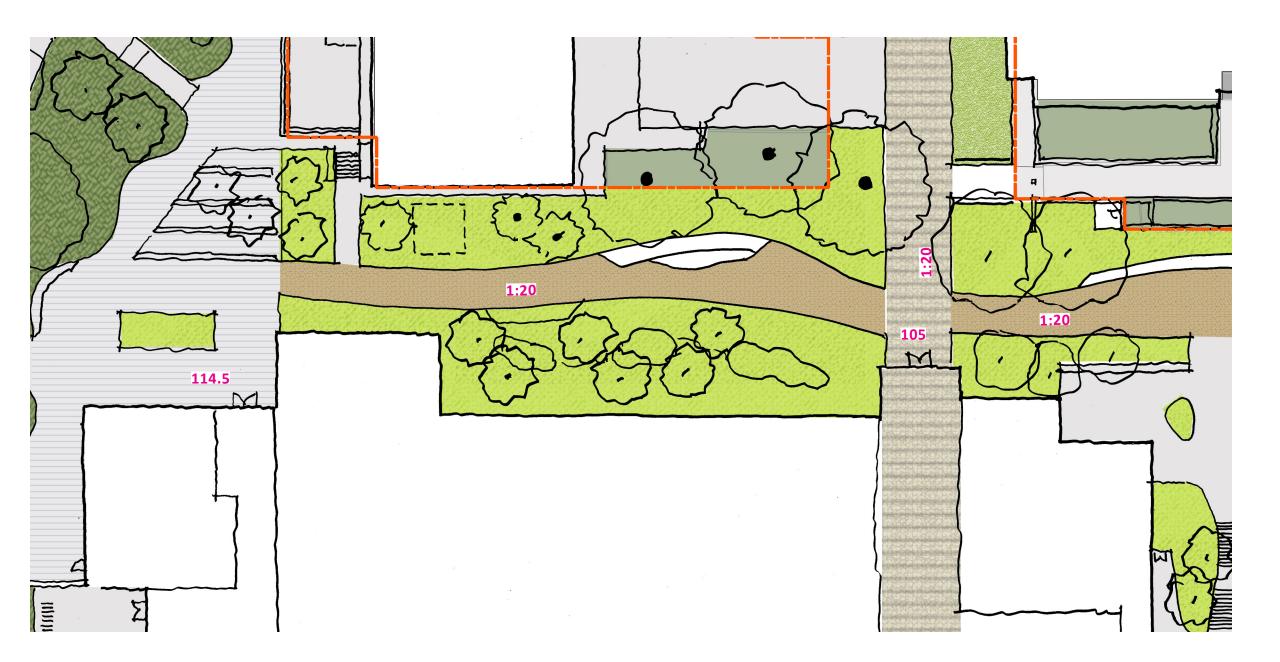
GARDEN WALK - OPTION 1 - Straight Path



GARDEN WALK - OPTION 1 - Straight Path



GARDEN WALK - OPTION 2 - Curved Path



GARDEN WALK - OPTION 2 - Curved Path



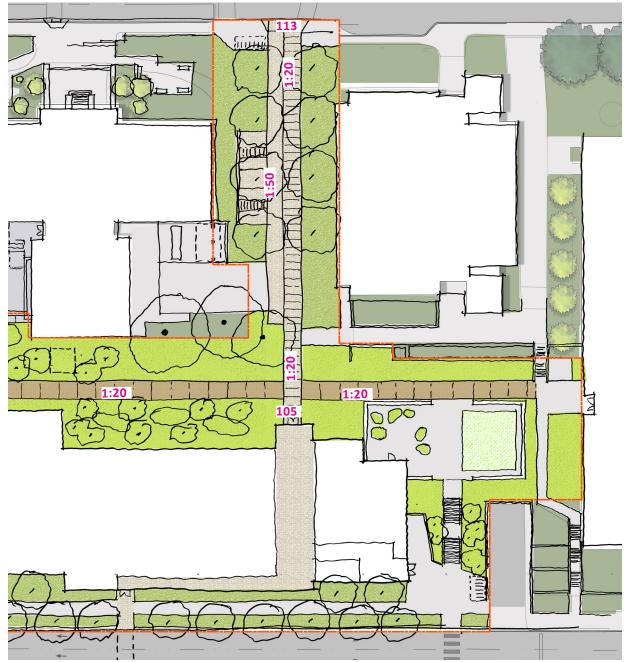
GARDEN WALK - OPTION 2 - Curved Path

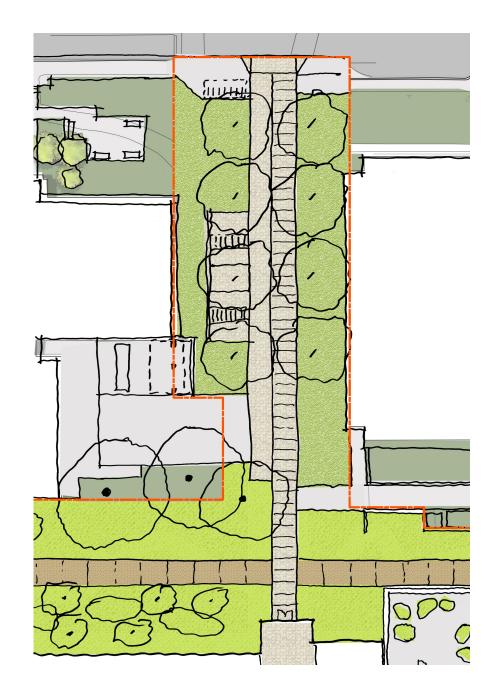






URBAN PASSAGE - Asotin Lane

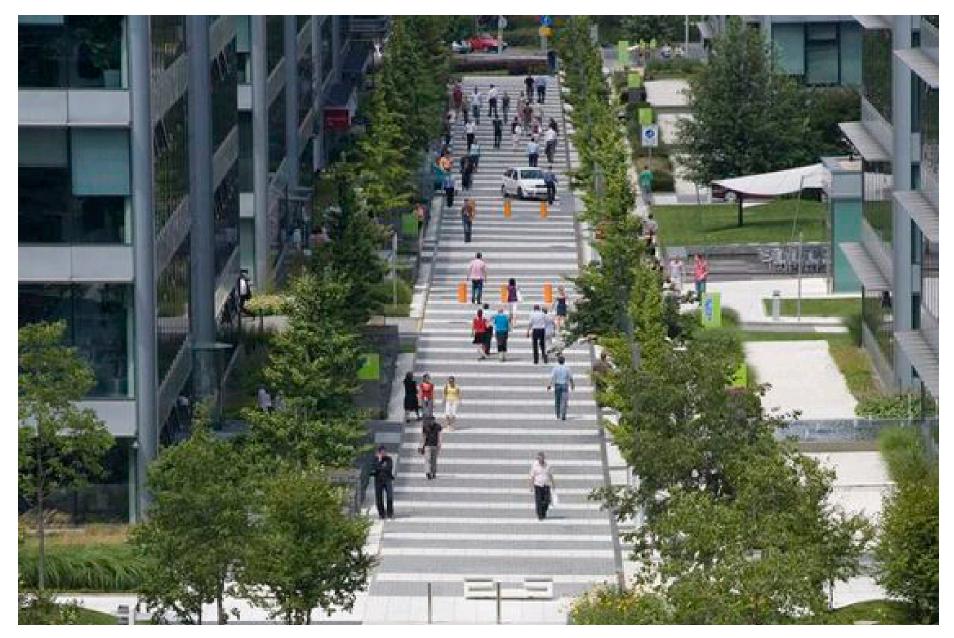




URBAN PASSAGE - Asotin Lane

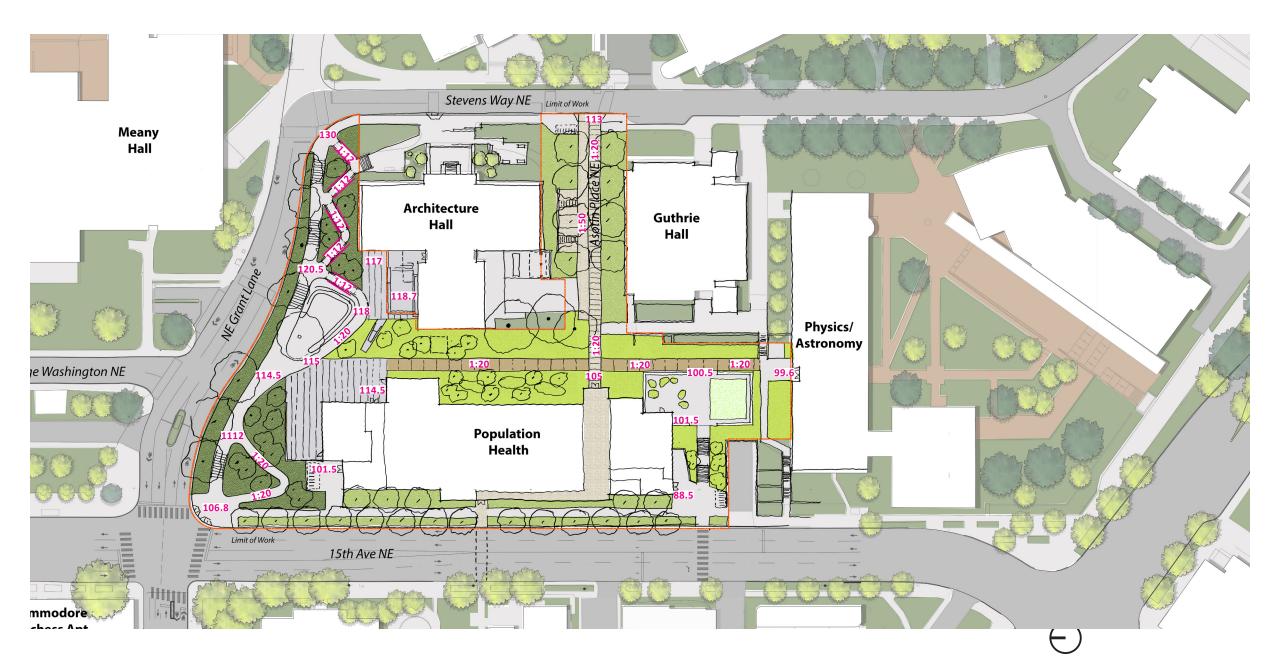


URBAN PASSAGE - Asotin Lane

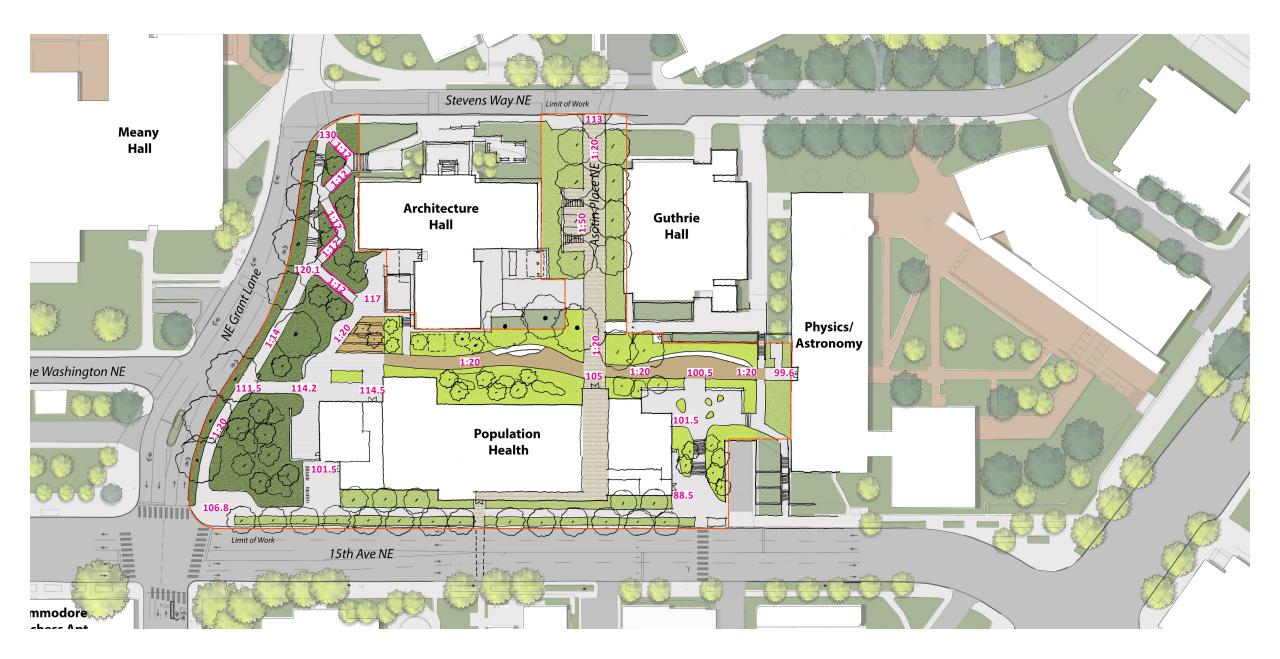




LANDSCAPE SCHEMATIC DESIGN - OPTION 01



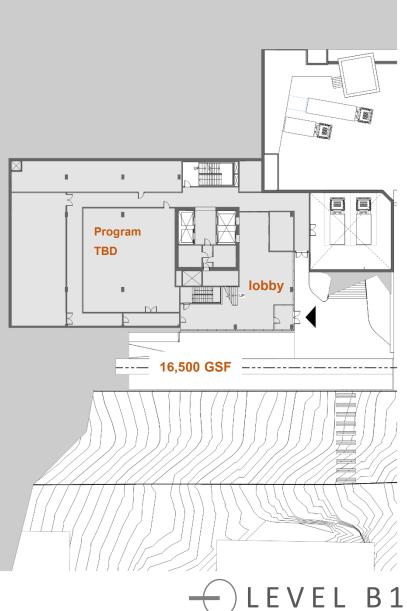
LANDSCAPE SCHEMATIC DESIGN - OPTION 02



POPULATION HEALTH FACILITY architectural design progress

BASEMENT EXTENTS

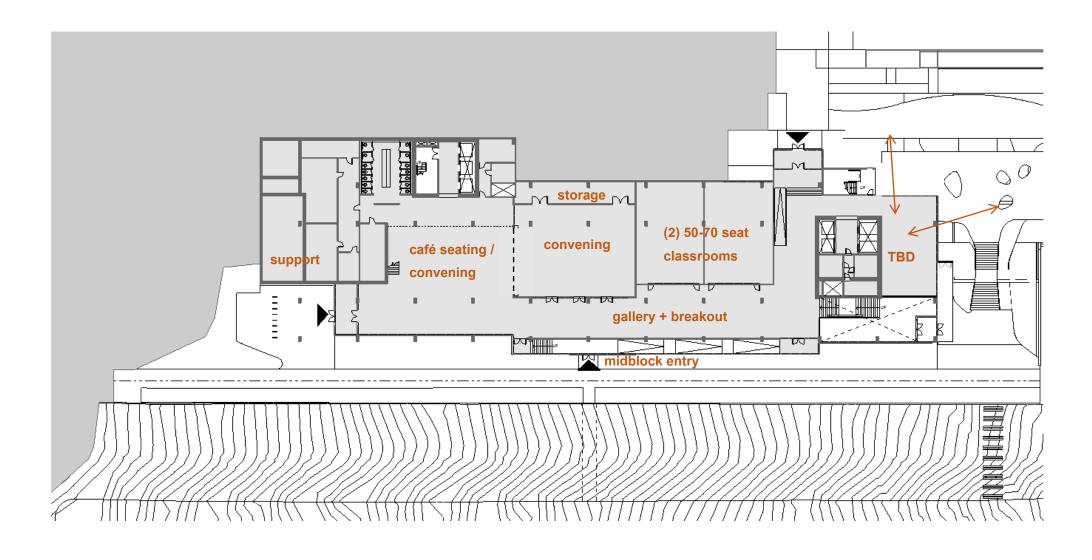




BASEMENT EXTENTS

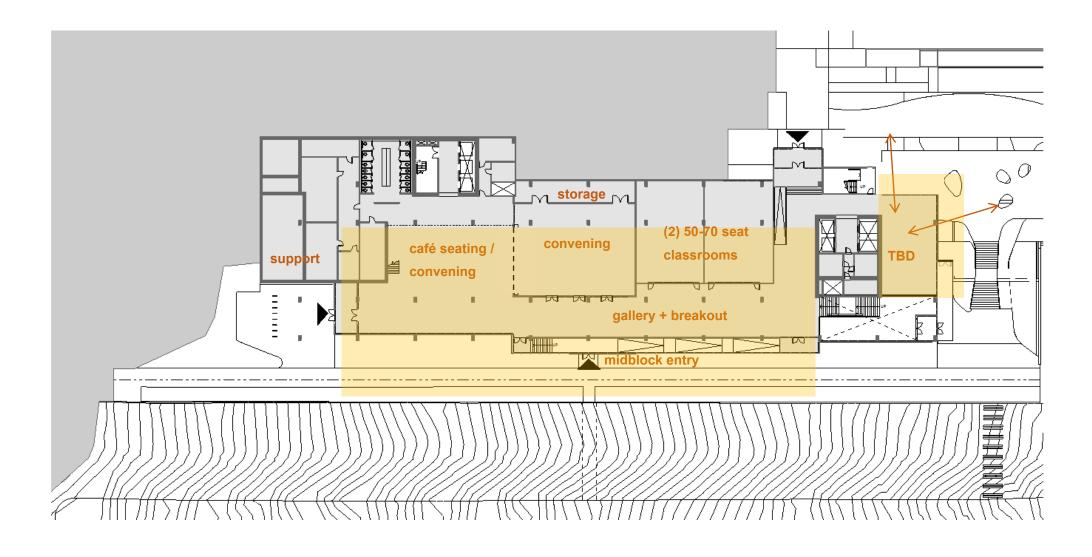


BUILDING ENTRIES + GROUND FLOOR PROGRAM



- LEVEL 1

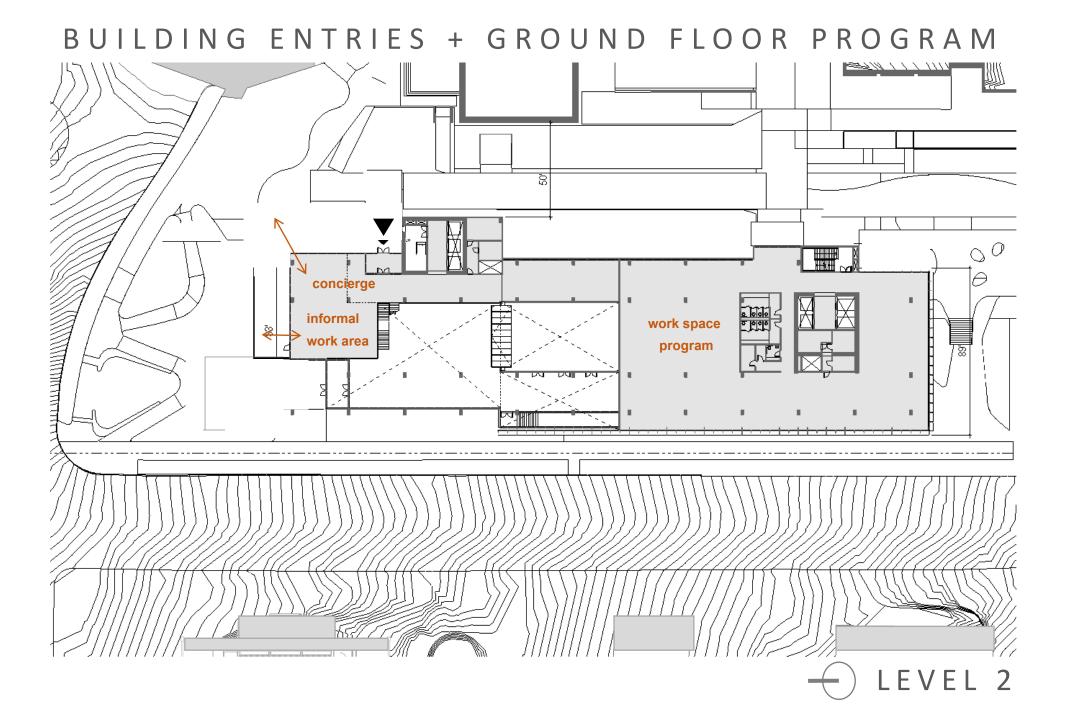
BUILDING ENTRIES + GROUND FLOOR PROGRAM

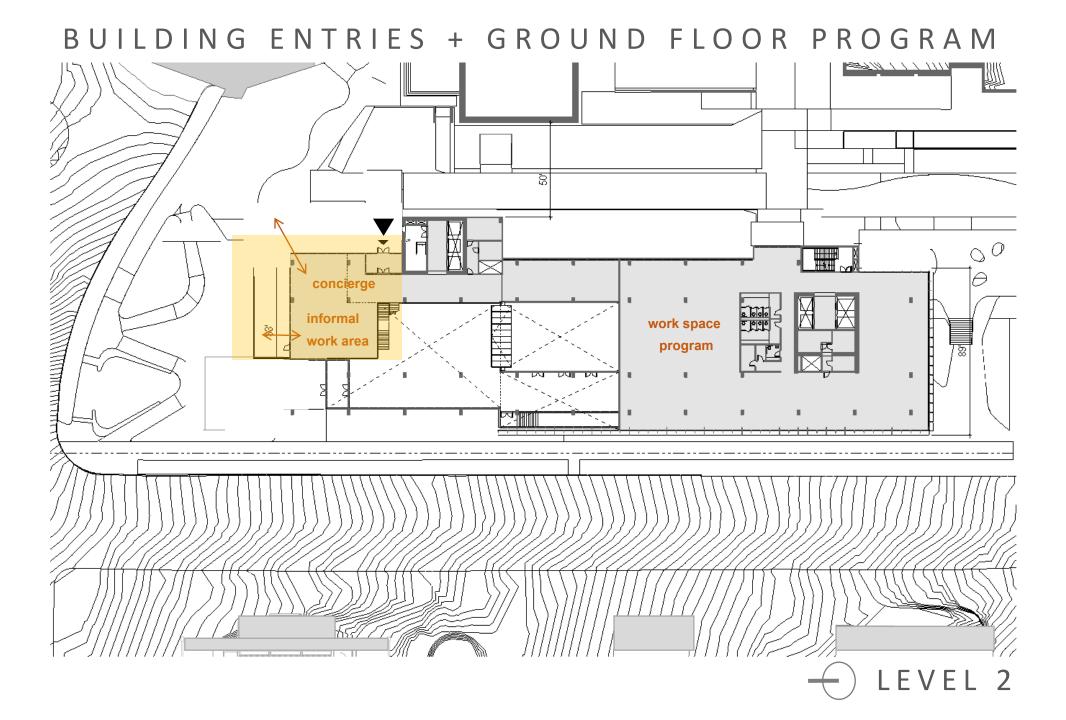


- LEVEL 1



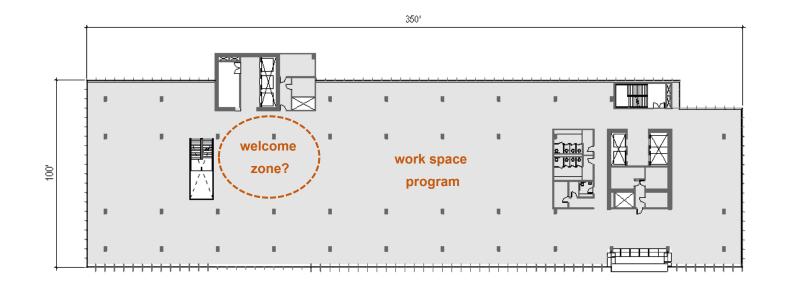








TYPICAL OFFICE FLOOR PLATE





CONNECTION TO (ONE'S) SELF



personal health / wellness

daylight / views / fresh air

individual control

space to focus

CONNECTION TO THE TEAM (family, community)



chance encounters

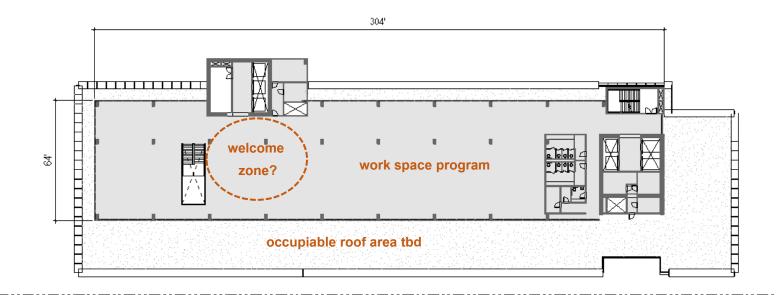
team engagement

the initiative

campus fabric

TOP FLOOR PLATE

- - - -



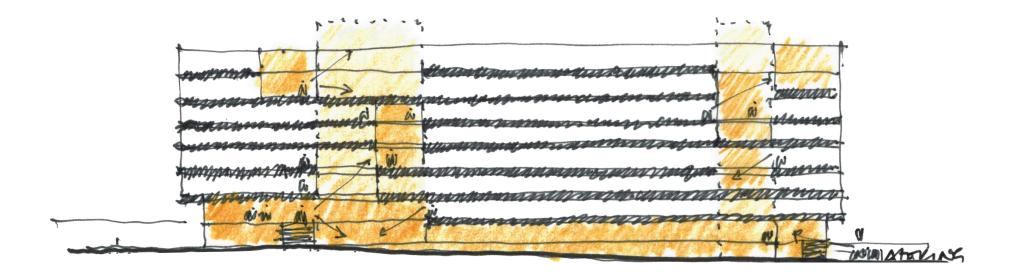
LEVEL 8

building modulation & expression

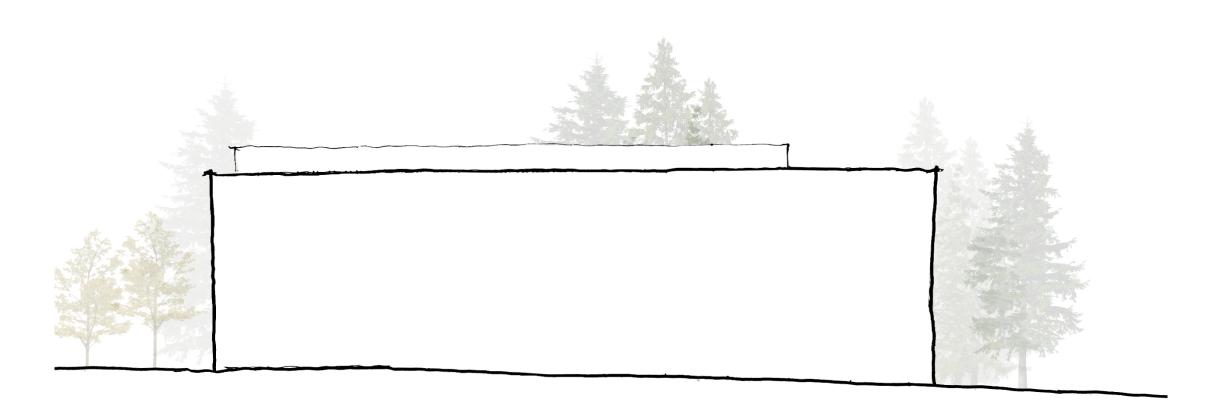
INFLUENCES & DRIVERS

- expression of connectivity
- variability in scale (macro & micro)
- universal daylight & views
- flexibility in program
- energy performance
- constructability + affordability

CONNECTIVITY ON DISPLAY

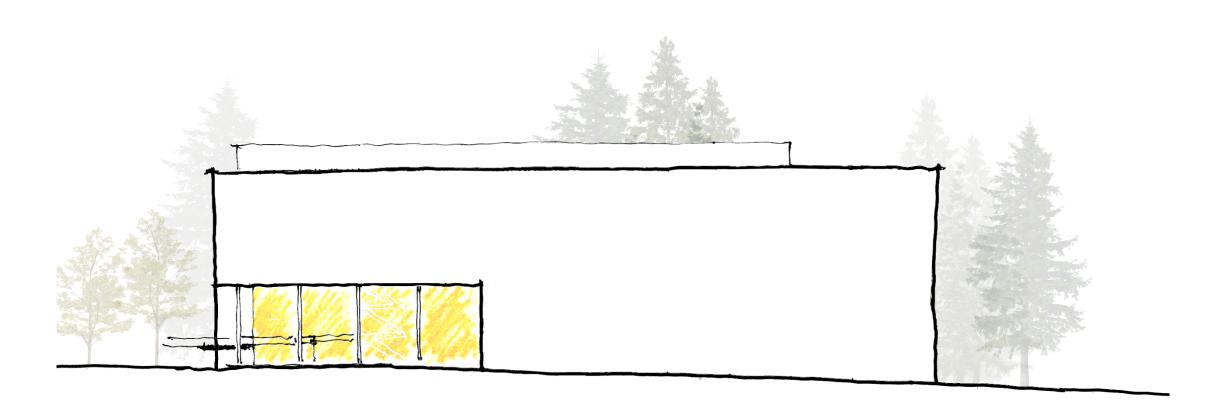


CONNECTIVITY ON DISPLAY



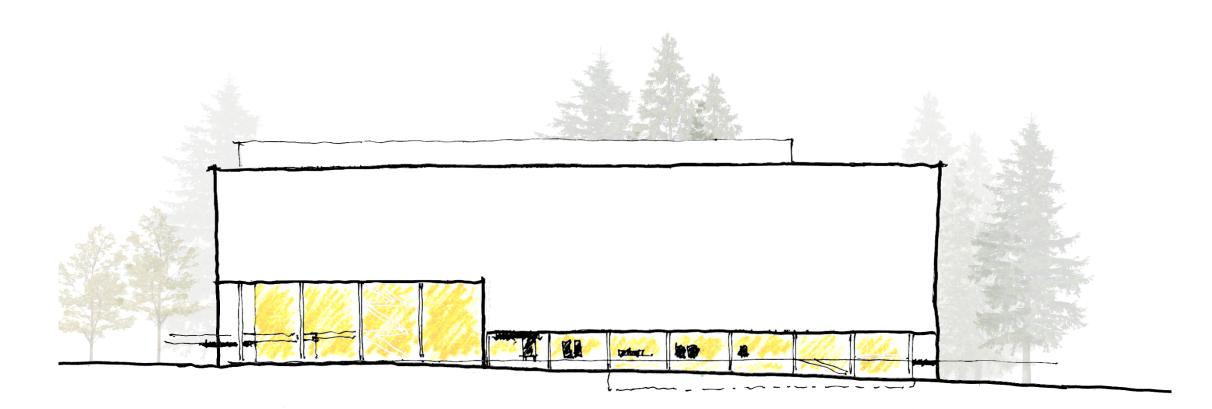
WEST ELEVATION

MACRO - CAMPUS CONNECTIVITY



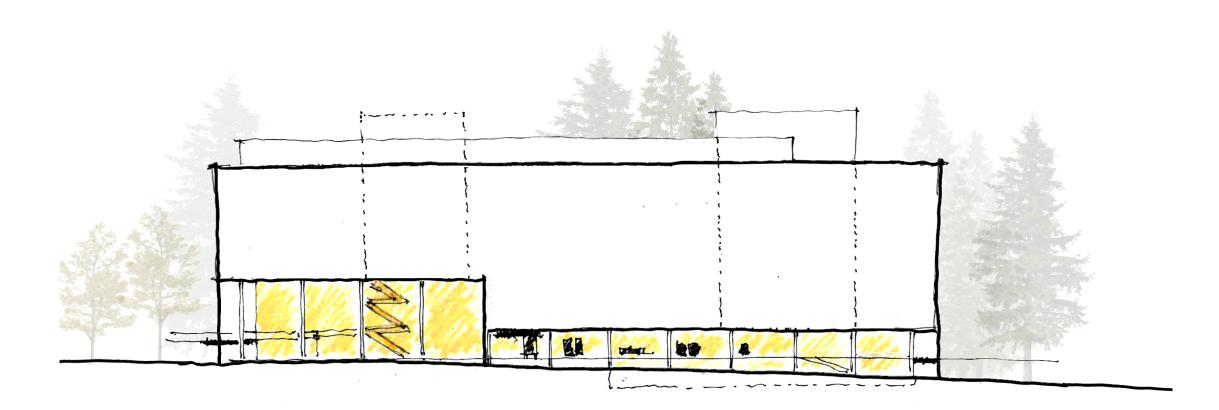
WEST ELEVATION

MACRO - STREETSCAPE CONNECTIVITY



WEST ELEVATION

MACRO - VERTICAL CONNECTIVITY



MACRO - PROGRAM CONNECTIVITY



MICRO - ENVIRONMENTAL CONNECTIVITY

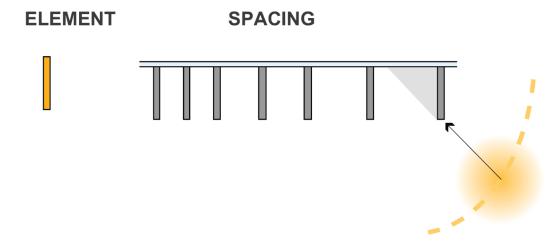


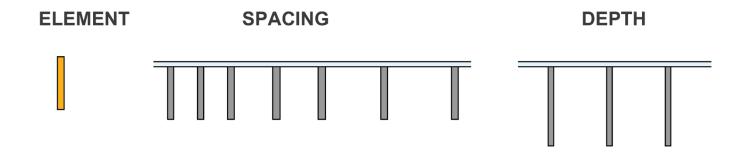
MICRO - ENVIRONMENTAL CONNECTIVITY

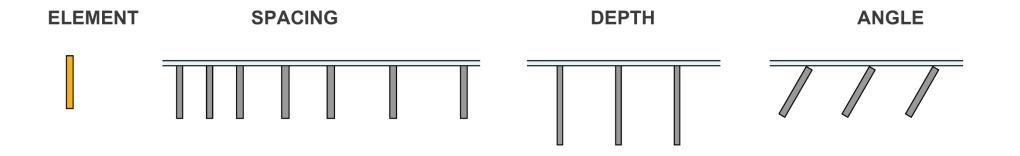


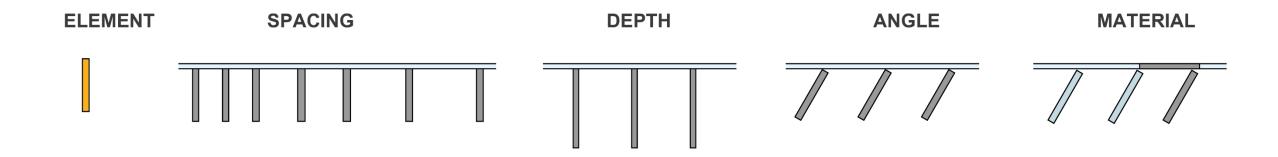


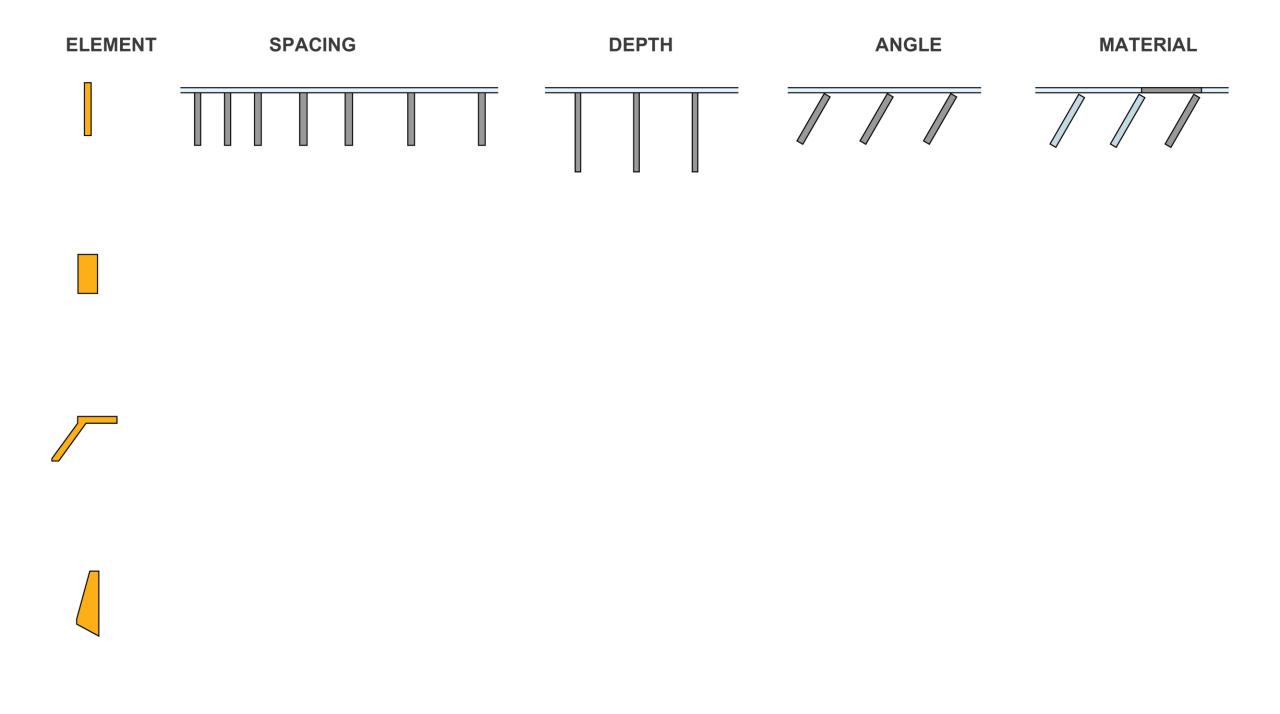
ELEMENT

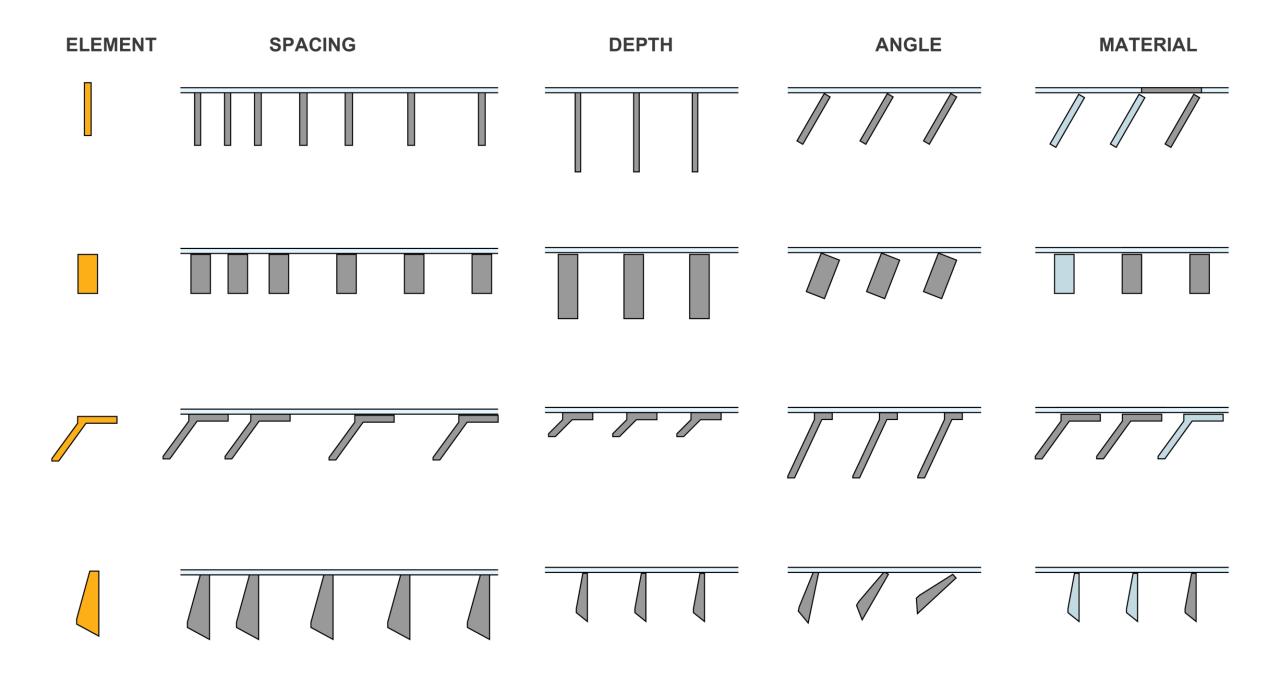












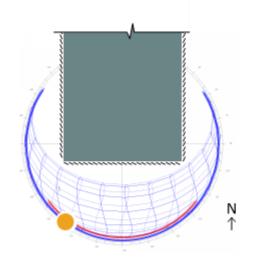
Summary

This initial study examines the optimal projection, angle and spacing of fixed external vertical shades and horizontal brise soleil to reduce peak cooling loads on the building. The west and south facades will experience the height of solar heat gains and therefore are the focus of this study.

External Vertical Shades

A simplified vertical shading solution might resemble the shading strategy in the plan view diagram below.

To understand the boundaries this shading strategy, two angles of projection and two projection-to-spacing ratios are explored.



Study 1 - 1:1 External Vertical Shades (90°)

Perpendicular (90°) vertical shades spaced 1 ft apart projecting 1 ft from the building. (A 1:1 projection-to-spacing ratio.)



Study 2 - 1:1 External Vertical Shades (45°)

1 ft deep vertical shades with 45° angle from the facade with a 1:1 projection-tospacing ratio.



plan view

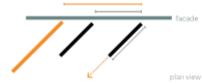
Study 3 - 1:2 External Vertical Shades (45°)

Vertical shades with a 45° angle from the facade, but a 1:2 projection-to-spacing ratio. (External vertical shades project 1 ft from the building and spaced 2 ft apart.)



Projection-to-Spacing Ratio

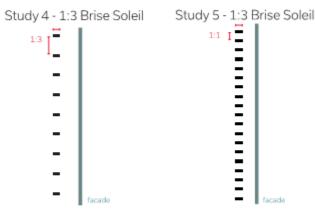
A 1:1 ratio in this study is representative by a 12 inch projection from the facade and spaced 12 inches apart. The same result on the building's peak loads are expected as long as this ratio is maintained. For example, vertical shades with a 14 inch projection spaced 14 inches apart with a 45° angle to the facade expect the same result as Study 2.



Brise Soleil

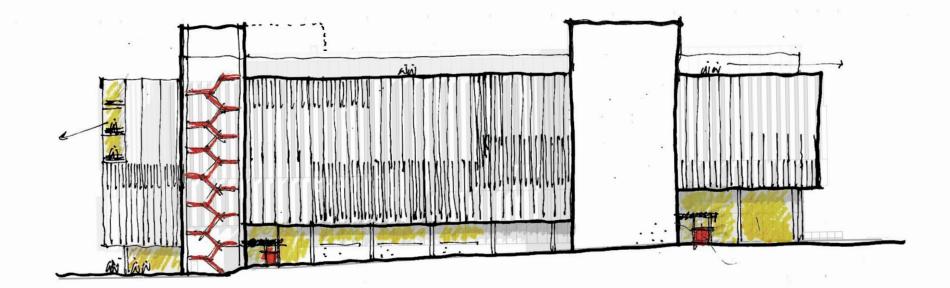
Study 4 and 5 analyze the optimal spacing for horizontal brise solells. Each brise soleil is 1 in deep and the set of brise soleils are mounted 6" from the facade. Study 4 examines a 1:1 projection-to-spacing ratio and Study 5 looks at 1:3 ratio.

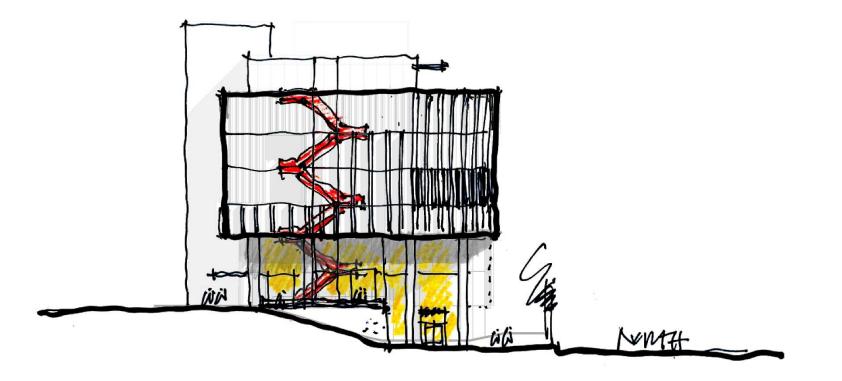




Study 6 - External Operable Shades

Study 6 examines external dynamic shades. These are assumed to be similar to the Warema external venetian blinds.

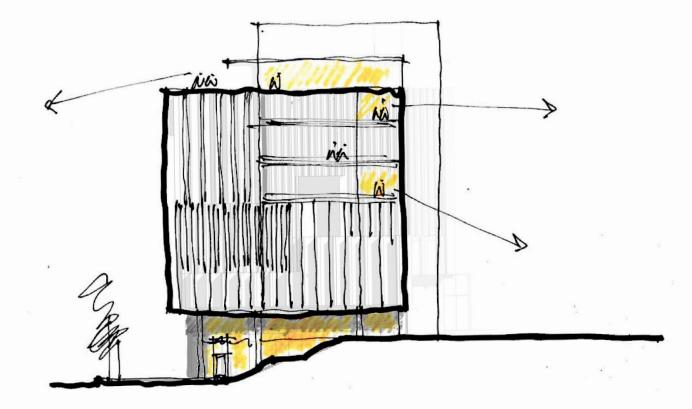




NORTH ELEVATION



NORTH ELEVATION



SOUTH ELEVATION

